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10/680,053	10/07/2003	Tommy Grigsby	2003-IP-009526 U1 USA	8290

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EXAMINER	
GAY, JENNIFER HAWKINS	
ART UNIT	**PAPER NUMBER**
3672	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	**Application No.** 10/680,053	**Applicant(s)** GRIGSBY ET AL.
	Examiner Jennifer H Gay	**Art Unit** 3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *9/13/04*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11,15,19,22-25,30-34 and 39* is/are rejected.

7)☒ Claim(s) *12-14,16-18,20,21,26-29 and 35-38* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/19/04,8/2/04*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 37 is objected to because the claim recites the limitation "the orienting device" in line 3. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Cairns et al. (US 6,017,227).

The examiner notes that the body of claims 11 and 15 do not positively recite any structure that is related to a wellbore; the phrase of "a tubing string" does not constitute the recitation of wellbore structure. Therefore, the examiner is treating claims 11 and 15 as the subcombination of a system for connecting fiber optic cables.

Regarding claim 11: Cairns et al. discloses a system for joining two fiber optic cables. The system includes a longitudinally telescoping travel joint **10** and **12** and a fiber optic line **40** extending longitudinally and internally through the travel joint. The traveling joint is configured to be interconnected in a tubular string (6:8-12, Figure 30).

The examiner notes that the system of Cairns et al. constitutes a "tubular string" in that, as shown in Figure 30, the cable is a hollow structure that includes fiber optic and electric cables. A tubular, or tube, by definition is a hollow cylinder that forms a passage.

tube

tube (t¡b, ty¡b) *noun*

1. a. A hollow cylinder, especially one that conveys a fluid or functions as a passage. b. An organic structure having the shape or function of a tube; a duct: *a bronchial tube*.

2. A small, flexible cylindrical container sealed at one end and having a screw cap at the other, for pigments, toothpaste, or other pastelike substances.
3. *Music.* The cylindrical part of a wind instrument.
4. *Electronics.* a. An electron tube. b. A vacuum tube.
5. *Botany.* The lower, cylindrical part of a gamopetalous corolla or a gamosepalous calyx.
6. *Chiefly British.* A subway; an underground.
7. A tunnel.
8. An inner tube.
9. *Slang.* a. Television: *What's on the tube?* b. A television set.[1]

Regarding claim 15: The fiber optic line extends between first and second fiber optic connectors of the travel joint (Figure 30).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 19, 22, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Restarick et al. (US 6,766,853) in view of Wetzel et al. (US 2002/0125008).

Regarding claim 19: Restarick et al. discloses system for completing a well that includes the following features:

- A well screen **24** including a first set of fiber optic connectors **28** and **30**.
- A seal assembly **18** including a second set of fiber optic connectors **28** and **30**.
- The seal assembly is oriented relative to the well screen in the wellbore such that the cooperating fiber optic connectors of the first

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and second sets engages with the fiber optic connectors of adjacent assemblies.

Restarick et al. discloses all of the limitations of the above claims except for specifically indicating that the well screen is used in a gravel packing assembly.

Wetzel et al. discloses a system similar to that of Restarick et al. Wetzel et al. further teaches a gravel packing assembly that includes a first connector through which a fiber optic line may pass (paragraph 0055) and seal assembly that would have a second connector in order to provide a continuous fiber optic line. The gravel packing assembly of Wetzel et al. includes a well screen **28** and gravel packing assemblies including well screens is considered well known in the art as a screen is required to allow fluid flow into the production tubing while retaining the gravel pack in position.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have used the well screen of Restarick et al. in a gravel packing assembly such as that taught by Wetzel et al. as it is considered well known in the art to use well screens in gravel packing assemblies. A screen is required to allow fluid flow into the production tubing while retaining the gravel pack in position.

Regarding claim 22: The gravel packing assembly of Wetzel et al. includes a fluid loss control device **102** that prevents and allows fluid flow through the device.

Regarding claim 24: Wetzel et al. further teaches a wellbore screen **28** through which a fiber optic line **60** may extend longitudinally (paragraphs 0034-0037).

Regarding claim 25: The fiber optic line of Wetzel et al. may also extend longitudinally within the sidewall of the well screen.

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Restarick et al. (US 6,766,853) in view of Wetzel et al. (US 2002/0125008) as applied to claim 19 above, and further in view of Patel (US 6,684,950).

Restarick et al. and Wetzel et al. disclose all of the limitations of the above claims except for the fluid loss control device being actuated in response to the engagement between the seal assembly and the gravel packing assembly.

Patel discloses a wellbore fluid loss control device. The device **300** is located on a first assembly **32** and prevents flow through the first assembly until a second assembly **44** engages the first assembly (Figure 6).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified Restarick et al. in view of Wetzel et al. to include a fluid loss control device as taught by Patel in order to have prevented flow through the apparatus until the entire apparatus was assembled. This would have allowed characteristics of the produced fluid to be measured after the chain of fiber optic cables were connected.

7. Claims 30, 31, 33, 34 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Restarick et al. (US 6,766,853) in view of Patel (US 6,684,950).

Regarding claim 30: Restarick et al. discloses a system for completing a wellbore. The system includes the following features:

- ➢ A first assembly installed in the wellbore where the first assembly includes a fluid control device **20** and a first fiber optic line.
- ➢ A second assembly installed in the wellbore and engaged with the first assembly where the second assembly includes a second fiber optic line (Figure 6).

Restarick et al. discloses all of the limitations of the above claims except for the first assembly including a fluid loss control device that prevents flow until the second assembly is engaged with the first assembly.

Patel discloses a wellbore fluid loss control device. The device **300** is located on a first assembly **32** and prevents flow through the first assembly until a second assembly **44** engages the first assembly (Figure 6).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified Restarick et al. to include a fluid loss control device as taught by Patel in order to have prevented flow through the apparatus until the entire apparatus was assembled. This would have allowed characteristics of the produced fluid to be measured after the chain of fiber optic cables were connected.

Regarding claim 31: The fluid control device is a valve that selectively permits fluid flow through the production tubing.

Regarding claim 33 and 34: The first assembly may also include a well screen **24** and a packer **18** where the fiber optic line extends longitudinally through the screen and the packer.

Regarding claim 39: The fluid loss control device of Patel permit one-way flow through the device.

8. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Restarick et al. (US 6,766,853) in view of Patel (US 6,684,950) as applied to claim 30 above, and further in view of Wetzel et al. (US 2002/0125008).

Restarick et al. and Patel disclose all of the limitations of the above claims except for the fluid loss control device preventing and allowing fluid flow through a wellbore screen.

Wetzel et al. discloses a system similar to that of Restarick et al. Wetzel et al. further teaches the system including a fluid loss control device **102** that prevents and allows fluid flow through a wellbore screen.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified Restarick et al. in view of Patel such that the fluid loss control device prevented and allowed fluid flow through a wellbore screen as taught by Wetzel et al. in order to have provided a means for filtering the fluid entering the wellbore. This would have reduced the wear on the various pieces of equipment in the wellbore as well as the need for surface equipment to remove debris from the produced fluid.

Allowable Subject Matter

9. Claims 12-14, 16-18, 20, 21, 26-29, and 35-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4 of copending Application No. 10/680,625. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 4 of Application No. 10/680,625 recite essentially the same limitations that are recited in claim 1 of the instant application and could be used to reject claim 1 if the application qualified as prior art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

12. In view of applicant's amendment, the objection to the specification has been withdrawn.

13. Applicant's arguments with respect to claims 1-39 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The remaining references made of record disclose various fiber optic connectors and wellbore equipment that uses fiber optics.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H Gay whose telephone number is (703) 308-2881. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (703) 308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Bagnell
Supervisory Patent Examiner
Art Unit 3672

JHG
October 21, 2004